

Spray Foam Adhesives



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What is Spray Foam Adhesive?

Spray foam adhesives are relatively new to the marketplace. They come in the same form as an insulating spray foam, but work specifically for adhesion. They have very low expansion and will work exceptionally well in wet conditions. They also have a very good quality applicator gun that will allow you to start a can of spray foam adhesive one-day and continue days later with no worry of the nozzle being clogged.

Benefits of spray foam adhesives

Spray foam adhesives can, in certain jobs, help speed up construction, and can eliminate extra securement of forms by replacing a percentage of the, cribbing, strapping, taping, etc. (see also: Some area's of benefit)

WHAT BRAND DOES ARXX BUILDING PRODUCTS RECOMMEND?

There are many different brands on the market today with new ones added on a regular bases. Because all spray foam adhesives have their own characteristics, Arxx recognizes one brand as the benchmark to which others should be compared. Based on the testing performed at Arxx, **Enerbond SF** from Flexible Products Company of Canada Inc. provides the best combination of adhesive strength, working time, volume, etc. The onus is on the distributor or installer to use the information here as a basis of comparison should you choose to use another brand.

HOW MUCH DO YOU USE?

We have found that a 1/2" bead of **Enerbond SF** applied along the centerline of the interlocking diamonds on both sides of the Arxx form, will yield a more than adequate bond. Practice has shown that horizontal joints have been the easiest to apply to, and that vertical joints seldom need to be glued. In most cases gluing the bottom two and top two courses together will provide the best results.

HOW STRONG IS ENERBOND SF?

Because cure times fluctuate with temperature and humidity, it is recommended that the installer glue several scrap pieces of Arxx together with **Enerbond SF** as test samples. This way when you are ready for concrete placement you can test your samples to see if the **Enerbond SF** has cure sufficiently. In most cases, after a few hours of cure time the EPS of the form units will fail before the adhesive. This does not represent the full strength of the adhesive, but will provide more than adequate adhesion for most Arxx jobs.

WEATHER CONCERNS

Cold or wet conditions represent challenges to the conventional method providing additional form support. Tape often won't stick to the Arxx forms in these conditions. **Enerbond SF** however will work very well in cold and wet weather. Application of **Enerbond SF** slows down as temperature drops, so by keeping the can warm in your vehicle in colder weather will help to speed up production.

Also, cure time of **Enerbond SF** will increase as temperatures drop. You can expect to wait longer in cold weather before having the strength required for concrete placement.

HOW MUCH WILL IT ADD TO YOUR COST?

We have estimated that you will add very little cost to your job with the use of **Enerbond SF** and may even save money due to labor savings. (See appendix for estimating quantities)

DO YOU HAVE TO USE IT?

NO. **Enerbond SF** will help you on some jobs (see Some areas of benefit) but does not need to be used on all jobs.

Some areas of benefit:

PILES OR PIERS

We have found **Enerbond SF** to be extremely beneficial when you are working on piles or piers. When used in the joints of the first and second course, you will find it turns the Arxx forms into a beam that tends to hold itself straight during concrete placement. Using this technique will save the installer time and material when it comes to cribbing.

SERVICE PENETRATIONS

Enerbond SF will aid to secure and seal service penetrations.

HEIGHT ADJUSTERS

By using **Enerbond SF** to adhere both top and bottom of height adjuster will eliminate the need to use fiber tape on this joint.

ADJUSTABLE AND 90 DEGREE CORNER FORM UNITS

To stop any movement of formwork at the corners during concrete placement, use **Enerbond SF** in the vertical and horizontal joints

WINDOWS

Using **Enerbond SF** at window openings will help maintain alignment of wood bucks and may eliminate a percentage of strapping required.

WARNING: Using **Enerbond SF** at an opening may restrict settlement of Arxx.

BOTTOM COURSE

Enerbond SF has been used in place of kickers/guide boards, to hold the alignment of forms during construction and concrete placement. After first two courses of Arxx have been placed, inject a shot of **Enerbond SF** every 16" along wall, between Arxx and footing/slab, to help hold your wall in place.

TOP COURSE

Enerbond SF will help hold the top course in location for future stories of Arxx forms. It will also help keep your job straighter as it limits any possible movement during concrete placement. At this location we recommend using **Enerbond SF** on vertical joints as well as horizontal joints.

EXTENDED BRICKLEDGE

Enerbond SF will aid to secure a course of Arxx on top of an extended brick ledge.

TRANSITION BETWEEN 6/8" TO 4"

When the 4" form is attached to the 6" or the 8" form, only one side will interlock. The side that does not attach will have the pressure of concrete forcing up from below. To help hold the 4" in place we suggest the use of **Enerbond SF** between both the interlocking diamonds on one side, and the t-bar and bottom of other side.

Cautions: When using **Enerbond SF**, one needs to remember to pre-plan the job as you may not be able to take apart what you have put together once it has cured.

Sources

TABLE 1

HOT KNIVES AND BLADES		
Avalon Concepts Corp.	1055 Leisz's Bridge Road, Leesport, PA 19533	800.636.8864 www.avalonconcepts.com
Windlock Select		877-468-5643 www.windlockselect.com
EXPANDING FOAM		
Flexible Products Company	Richmond Hill, ON L4B 1E4	800.567.4447 www.flexibleproducts.com
Windlock Select		877-468-5643 www.windlockselect.com
APPLICATOR GUNS		
Flexible Products Company	Richmond Hill, ON L4B 1E4	800.567.4447 www.flexibleproducts.com
Windlock Select		877-468-5643 www.windlockselect.com

Tips!

Check that adhesives are compatible with EPS before using.